

**PROPOSED ACTION MEMORANDUM FOR THE  
CONTAMINANT STABILIZATION OF  
UNDERGROUND STORAGE TANKS**

**Rocky Mountain Remediation Services, L.L.C.**

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## ACRONYMS

ARAR .....	Applicable and Relevant and Appropriate Requirements
CERCLA .....	Comprehensive Environmental Response, Compensation, and Liability Act
IHSS .....	Individual Hazardous Substance Site
NEPA .....	National Environmental Policy Act
PAM .....	Proposed Action Memorandum
RCRA .....	Resource Conservation and Recovery Act
RFETS .....	Rocky Flats Environmental Technology Site
UST .....	Underground Storage Tank

## 1.0 PURPOSE

This accelerated removal action is proposed to support the stabilization of potential contaminants in seven Interagency Agreement underground storage tanks (USTs) located at the Rocky Flats Environmental Technology Site (RFETS) (the Site). This removal action is designed to prevent, minimize, or mitigate damage to the public health or welfare or to the environment which may otherwise result from a release or threat of release of removable contaminants (CERCLA, 42 USC9601, Section 101(23)). This removal action proposes to use polyurethane foam, an inert material, to fill the tanks to prevent possible contaminant migration into the surrounding groundwater.

The seven underground storage tanks include the following:

<u>Tank Number</u>	<u>Building</u>	<u>IHSS</u>
Tanks 2 and 3	441	122
Tank 10	776	132
Tank 14	774	124.1
Tank 16	774	124.2, 124.3
Tank 40	889	121
Tank 4	443	129

Six of the underground storage tanks are described in detail in the *Accelerated Action Plan for Interagency Agreement Underground Storage Tanks Containing RCRA-Regulated Materials* (DOE-RFFO, December 1995). The seventh tank, Tank 4 of Individual Hazardous Substance Site (IHSS) 129 is described in the *Final Draft OU 10 Proposed Action Memorandum for the Building 443 Underground Fuel Oil Tanks #3 and #4 Accelerated Response Action* (DOE-RFFO, December 1994).

## 2.0 PROJECT DESCRIPTION

The idea behind stabilizing the underground storage tanks is to prevent the migration of any residual contamination left in the UST after its contents have been removed and the tank has been multi-rinsed. The inert material, polyurethane foam, is designed to stabilize the possible remaining contamination until a final action is authorized for the unit, such as a Record of Decision or a Resource Conservation and Recovery Act (RCRA) Closure Plan.

The inert material selected for this project was evaluated based on its material availability, effectiveness and handling properties, structural integrity, the future use or disposition, and cost. Polyurethane foam was chosen for this particular application primarily for the ease in the future disposition of the tank should removal of the underground storage tank become necessary during the decontamination and demolition of the associated buildings. Polyurethane foam, weighing two pounds per cubic foot, is much lighter than other substitute inert materials (such as concrete, which weighs 145 pounds per cubic foot). Therefore, the foam-filled USTs will be retrievable, via lifting out with a crane, during the final disposition of the associated buildings and surrounding area.

### **3.0 PROJECT APPROACH**

#### **3.1 REMOVAL ACTION OBJECTIVES**

Stabilizing possible residual contamination in underground storage tanks is consistent with the RFETS long-term objective to achieve accelerated risk reduction and cost-effective stabilization of the Site. By completing the stabilization, further migration of contaminants will be prevented by fixing any remaining contamination and minimizing risk to human health and the environment.

#### **3.2 PROPOSED ACTION**

Prior to stabilizing the underground storage tanks, the tanks will be prepared to meet the contractor specifications for stabilization. The liquid and solid contents of the tanks will be removed and managed according to their characteristics. All of the tanks will be triple rinsed prior to the introduction of the polyurethane foam.

#### **3.3 WASTE MANAGEMENT**

Wastes generated during the stabilization activities will be evaluated and handled appropriately according to its characteristics. Wastes may include leftover foam which can be disposed in the sanitary landfill at the Site. Groundwater that may have infiltrated into the tank between the rinsing effort and the foaming exercise will be managed in accordance with its characteristics.

### **4.0 ENVIRONMENTAL IMPACTS**

The National Environmental Policy Act (NEPA) requires that actions at RFETS be evaluated for potential impacts to the environment. Impacts to the natural environment resulting from this removal action will be minimal and are not expected to result in any adverse impacts to wetlands, floodplains, threatened or endangered species or their habitats, or to historic or cultural resources.

### **5.0 COMPLIANCE WITH APPLICABLE AND RELEVANT AND APPROPRIATE REQUIREMENTS (ARARS)**

In accordance with the Interagency Agreement (IAG), an objective of accelerated actions at the RFETS is the identification and compliance with federal and state ARARs that are associated with this proposed action. There are no ARARs relating to this proposed action of stabilizing rinsed underground storage tanks with polyurethane foam.

### **6.0 IMPLEMENTATION SCHEDULE**

The stabilization for all seven tanks is scheduled to commence in the third and fourth quarters of fiscal year 1996. These dates are projected from the work package; any delays, scope, or budget changes may affect these dates.

## 7.0 RESPONSIVENESS SUMMARY

**Ken Korkia, Citizens Advisory Board:** Although he appreciates the brevity of the recent PAMs, he believes this PAM to be exceptionally brief. What do the tanks contain? And what were the tanks made of?

Tank Number	Building	Construction	Contents
Tank 2/3	441	Concrete underground storage tank (UST)	Variety of wastes including nitrates, radionuclides, acids, bases, solvents, metals, soap, blood, bleach, and hydrogen peroxide
Tank 10	776	Concrete UST	Metals, radionuclides, and organics
Tank 14	774	Concrete UST	Acids, bases, radionuclides, and metals
Tank 16	774	Concrete UST	Acids, bases, radionuclides, and metals
Tank 40	889	Concrete UST	Acids, solvents, U-238, metals, detergents, soap, and grease
Tank 4	444	Carbon steel UST	Fuel oil #6 and solvents